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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,189	12/30/2003	Alan Welsh Sinclair	SNDK.337US0	9883
66785	7590	07/03/2007		
DAVIS WRIGHT TREMAINE LLP - SANDISK CORPORATION			EXAMINER	
505 MONTGOMERY STREET			PEUGH, BRIAN R	
SUITE 800				
SAN FRANCISCO, CA 94111			ART UNIT	PAPER NUMBER
			2187	
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			07/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/749,189

Applicant(s)

SINCLAIR, ALAN WELSH

Examiner

Brian R. Peugh

Art Unit

2187

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 and 18-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-17, 38 and 39 is/are rejected.
- 7) ☒ Claim(s) 40-42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/28/06, 8/24/06, 11/27/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This Office Action is in response to applicant's communication filed April 19, 2007 in response to PTO Office Action dated February 22, 2007. The applicant's remarks and amendment to the specification and/or claims were considered with the results that follow.

Claims 1-42 have been presented for examination in this application. In response to the last Office Action, claims 15-17 and 38-42 have been elected.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 4/28/06, 8/24/06, 11/27/06, is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites the limitation "the first array of memory cells" in line 2. There is insufficient antecedent basis for this limitation in the claim. Only "an array of memory cells" had been previously claimed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15-17, 38, and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Gonzalez et al. (US# 7,032,065).

Regarding claim 15, Gonzalez et al. teaches a non-volatile memory system, comprising: an array of memory cells arranged in separately programmable planes; a plane having multiple erase blocks, an erase block being the smallest unit of the array that may be individually erased (col. 11, lines 26-34); the system configured to select a number of planes according to characteristics of data to be stored (col. 11, lines 47-62); and the system configured to program individual erase blocks within selected planes in parallel (col. 11, lines 44-46).

Regarding claim 16, Gonzalez et al. teaches wherein an individual plane is selected according to the number of available erase blocks remaining in the individual plane (col. 11, lines 35-44).

Regarding claim 17, Gonzalez et al. teaches a second array of memory cells; wherein the first array of memory cells is in a flash memory and the second array of memory cells is in a non-volatile random access memory (col. 1, lines 14-17; col. 5, lines 27-33).

Regarding claim 38, Gonzalez et al. teaches a method of storing data in a nonvolatile memory connected to a host, comprising: receiving a first number of logically sequential sectors of data from the host (the two halves of the user data were sequential before splitting); selecting a second number of erase blocks for storage of the first number of sectors (as per example, the second number is two), each of the second number of erase blocks located in a different plane, the second number being less than the number of planes in the memory (two is less than eight), the second number being the smallest number of erase blocks that can contain the first number of sectors (as per example); and programming the first number of sectors to the second number of erase blocks in parallel (col. 11, lines 27-62).

Regarding claim 39, Gonzalez et al. teaches ones of the first number of sectors are stored in an individual one of the second number of erase blocks in a non-sequential order (once split, the data is no longer sequentially stored in the array).

Allowable Subject Matter

Claims 40-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art corresponds to related flash systems.

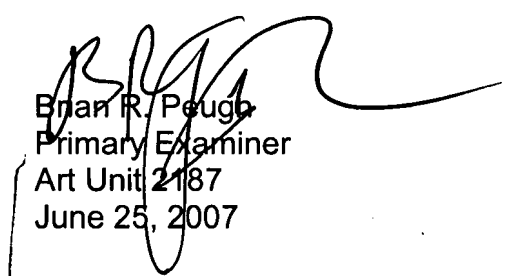
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Peugh whose telephone number is (571) 272-4199. The examiner can normally be reached on Monday-Thursday from 7:00am to 4:30pm. The examiner can also be reached on alternate Friday's from 7:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks, can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Brian R. Peugh
Primary Examiner
Art Unit 2187
June 25, 2007